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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,850

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James Daniel Asbury

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EXAMINER

CLARK, GREGORY D

ART UNIT

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4152

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,850	<b>Applicant(s)</b> ASBURY ET AL.	
	<b>Examiner</b> GREGORY CLARK	<b>Art Unit</b> 4152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02012006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 16 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 16 and 17 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02192006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-7, 9-15,18-23 drawn to product.

Group II, claim(s) 16 and 17, drawn to method.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The common technical feature does not provide a contribution over the prior art because the common technical feature is disclosed in Segawa (4,068,034).

During a telephone conversation with Thomas J. Appledorm on 09/09/2008 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-7, 9-15,18-23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 16 and 17 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently

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found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segawa (4,068,034).**

**Regarding Claims 1 and 2**, Segawa teaches a vehicle panel (Column 3, lines 17-20) comprising a core layer (called a priming material, polypropylene, Column 2, lines 62-63, 65 ), and formable metalized film (Column 3, line 55) bonded to said core layer. Segawa teaches that one of the heat insulating materials is metalized polyethylene terephthalate (column 3, lines 57-58). Segawa teaches that such materials have utility in vehicles (the examiner interprets this to include any area requiring heat insulation such as panels or headlines) for heat insulation (Column 3, lines 17-20). Segawa does not teach that the metalized film is formed in a non-flat topography for matching a contoured surface of an adjacent vehicle surface.

Those skilled in the art will recognize that thermoplastic materials such as polyethylene terephthalate and polypropylene are fully capable to conforming to the contour of a give surface topography.

Segawa discloses the claimed invention except for the metalized film formed on non-flat topography. It would have been obvious to someone of ordinary skill in the art

at the time of the invention was made to apply the metalized film to non-flat surfaces, since it has been held that the configuration was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration claimed was significant. In re Dailey, 357 F. 2d. 669, 149 USPQ 47 (CCPA 1966).

**Regarding Claims 3-5**, Segawa teaches a vehicle panel where in said layer of metalized film comprises polyethylene terephthalate (PET) (Column 3, line 58) and the core layer comprises an insulting material (Column 2, line 54) which includes polypropylene (Column 2, line 65).

**Regarding Claims 6 and 7**, Segawa teaches the invention of claim 1. Segawa does not mention the term headliner but the term insulting material is used. The applicant indicates that a metallized film can be used as a headliner. Segawa teaches that metalized layer a can be used as the insulting material (Column 3, lines 51-52). Segawa also teaches the insulting material (headliner) is best positioned for exposure to radiant heat (see upper surface of the layer 3 in FIG. 2) facing the direction of the source of radiant heat (Column 3, lines 22-24). Therefore the insulating material taught by Segawa can be used as a headliner.

**Claims 9-15, 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segawa (4,068,034) in view of Ogawa (2004/0124668).**

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**Regarding Claims 9 and 18**, Segawa teaches a vehicle panel (Column 3, lines 17-20) comprising a core layer (film, Column 3, line 53), and formable metalized film (Column 3, line 55) bonded to said core layer. Segawa teaches that one of the heat insulating materials options is metalized polyethylene terephthalate(column 3, lines 57-58). Segawa does not specifically teach that such heat insulating materials are to the vehicle roof substantially without an air gap. Ogawa teaches applying heat insulation material to the inside portion of an outer vehicle panel mainly exposed to solar radiation (paragraph 36) which include polypropylene (paragraph 58). Figure 3A shows that the insulating material is bonded to the inside portion of the non-flat outer vehicle panel substantially without an air gap. Ogawa teaches the heat penetration is prevented by attaching a thin heat insulator (material) to the back face of the outer panel (paragraph 8).

It would have been obvious to someone of ordinary skill in the art at the time of the invention to combine the metalized binary film construction of Segawa to the inside of the outer vehicle panel taught by Ogawa to achieve the desired heat insulation effects (paragraph 37).

**Regarding Claim 10**, Segawa and Ogawa teach the invention of claim 9. Segawa also teaches that the adhesion of the metalized layer to polypropylene layer (priming layer) can be accomplished with an adhesive or a binding agent (Column 2, line 68; Column 3, lines 1-2).



**Regarding Claim 11**, Segawa and Ogawa teach the invention of claim 9.

Segawa also teaches that one of the options for a metalized film comprises polyethylene terephthalate (PET) (Column 3, line 58).

**Regarding Claim 12**, Segawa and Ogawa teach the invention of claim 9.

Segawa also teaches that the metalized layer is bonded to the priming material (called core layer by applicant) (Column 2, lines 147-48).

**Regarding Claim 13**, Segawa and Ogawa teach the invention of claim 9.

Segawa also teaches that one of the options for priming material (to bond to the metalized layer) comprises polypropylene (Column 2, line 65).

**Regarding Claim 14**, Segawa and Ogawa teach the invention of claim 9.

Segawa also teaches that the heat-insulation metalized material can be used for covering surfaces such as of building roofs, exterior walls, outdoor oil tanks, refrigerators, vehicles (which encompasses vehicle panel/headliner), other structures for the purpose of insulating the surfaces against radiant heat (Column 1, lines 6-12).

**Regarding Claim 15**, Segawa and Ogawa teach the invention of claim 9.

Segawa also teaches that such insulation materials (polyvinylidene fluoride or

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polyethylene terephthalate Column 3, lines 51-59) are effective with the upper surface facing the direction of radiant heat (Column 3, lines 23-24).

**Regarding Claim 19**, Segawa and Ogawa teach the invention of claim 18.

Segawa teaches that one of the heat insulating materials options is metalized polyethylene terephthalate(column 3, lines 57-58).

**Regarding Claim 20**, Segawa and Ogawa teach the invention of claim 18.

Segawa teaches a vehicle panel (Column 3, lines 17-20) comprising a core layer (film, Column 3, line 53).

**Regarding Claim 21**, Segawa and Ogawa teach the invention of claim 18.

Segawa teaches that one of the options for priming material (to bond to the metalized layer) comprises polypropylene (Column 2, line 65).

**Regarding Claim 22**, Segawa and Ogawa teach the invention of claim 20.

Segawa teaches a core layer (film, Column 3, line 53) bonded to a formable metalized film (Column 3, line 55).

**Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Segawa (4,068,034) and Ogawa (2004/0124668) in view of Earnest (2004/0202807).**

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**Regarding Claim 23**, Segawa and Ogawa teach the invention of claim 22.

Segawa teaches a vehicle panel (Column 3, lines 17-20) comprising a core layer (film, Column 3, line 53), and formable metalized film (Column 3, line 55) bonded to said core layer. Ogawa teaches applying heat insulation material to the inside portion of an outer vehicle panel mainly exposed to solar radiation (paragraph 36). Segawa and Ogawa do not teach that the metalized layer is bonded to a fabric material. Earnest teaches a composite insulation material comprising a layer of refractory fabric bonded to a layer of a metallic material (abstract). Earnest also teaches that low cost, easy to utilize insulation material having good thermal and acoustic absorption has significant utility in connection with motor vehicles (which includes panels and headliners) including land vehicles, marine vehicles, and aerospace vehicles (paragraph 5).

It would have been obvious to someone of ordinary skill in the art at the time of the invention to combine the metalized binary construction of Segawa and the insulating material surface location (inside the outer most surface, figure 3A) taught by Ogawa with the fabric based insulation material taught by Earnest to achieve the desired heat-insulation. Earnest also teaches that low cost, easy to utilize insulation material having good thermal and acoustic absorption has significant utility in connection with motor vehicles (which includes panels and headliners) including land vehicles, marine vehicles, and aerospace vehicles (paragraph 5).

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY CLARK whose telephone number is (571)270-7087. The examiner can normally be reached on M-Th 7:00 AM to 5 PM Alternating Fri 7:30 AM to 4 PM and Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on (571)272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GDC

/Joseph S. Del Sole/  
Supervisory Patent Examiner, Art Unit 4152